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REMARKS

Claims 1-21 and 25-27 remain pending in this application. Claims 22-24 have been cancelled. The Office action dated November 14, 2005 has been reviewed and carefully considered, and as a result, further reconsideration of this application is requested in view of the following.

The continued rejection of claims 1, 3-6, 9, 10, 13, 17 and 25 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2005/0108386 ("Acharya"), is respectfully traversed.

The present invention is directed to selection of a serving network by a client node connected to an access network. Serving network advertising information is sent to the client node, the client node selects a serving network that the client node wishes to use for communication based on the received network advertising information, the client node sends serving network provider information of the selected serving network to the access network, and a secure communication tunnel is established through the access network between the client node and an access router having a connection to the selected serving network. In this way, the client node is able to securely send and receive transmission packets to the selected serving network through the access router via the access network,

Thus, the present invention presents an IP-layer based model for network selection and multihoming by a client node, wherein network selection by a client node is made from network advertising information provided to the client node, and serving network access is provided through an access network via a communication tunnel to an access router.

The present invention thus provides a way for a client (i.e., user) to obtain information on serving networks, and to have the ability to select a serving network based on the obtained information and to establish connectivity to the selected serving

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network via a tunnel established between the client and an access router through an access network. In other words, the present invention enables a client to establish connectivity with a selected serving network in a "control plane." In contrast, Acharya is directed to maintaining connectivity with multiple serving networks, and selecting, for each outgoing data packet, an appropriate one of the connected serving networks on a packet-by-packet basis. In other words, Acharya is directed to selection of a serving network in a "data plane."

As previously pointed out, Acharya thus discloses a network routing control method by an enterprise server based on MPLS (Multi-Protocol Label Switching) architecture.

Contrary to the invention as set forth in claim 1, Acharya fails to disclose a method of dynamically connecting a client node to a serving network comprising "sending serving network provider advertising information to said client node." Despite the Office action's assertion otherwise, the server (100, 200) of Acharya is not a "client" as disclosed and claimed in the present application. Contrary to the assertion of the Office action, there is no disclosure in Acharya of the server (100 or 200) requesting services from another server. Paragraphs 0017-002 of Acharya do not disclose any request of services by the server 200 from any other node. Instead, Acharya describes a relative performance measurement by the server either by "pinging" a destination through each link, or by measuring performance metrics in an application specific manner based on replies to requests sent over different links. Accordingly, Acharya fails to disclose any method of selection of network service providers at a single client location as disclosed and claimed in the present application.

Further, Acharya utterly fails to disclose any sending of network provider advertising information to the server. Instead, the server makes route control decisions based on measurement of relative performance or availability on each of the provider links, either by active probing (pinging) or by passive performance measurement through normal application interactions with actual clients. Once the performance

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metrics are obtained, the server directs outgoing traffic over the most appropriate link by sending packets on the appropriate MPLS Label-Switched Path (LSP). Contrary to the assertion of the Office action, Acharya's server is not "made aware of the available service provider networks to connect with." To the contrary, the Acharya invention is based on an environment where subscribers are multi-homed to multiple ISPs. See paragraph 0014. In other words, the subscriber is already connected to multiple service providers, with the server simply deciding over which link to send a particular data packet based on measured performance characteristics of the multiple connected links.

Acharya discloses that alternate embodiments may use either different VLANs or IP-level tunnels to direct packets to specified outgoing links; however such embodiments similarly fail to disclose the method as set forth in claim 1 for the same reasons explained above.

Additionally, Acharya fails to disclose "receiving from said client node serving network provider information specifying a serving network to which said client node desires access." Again, Acharya fails to disclose any interactions or operations of client nodes that may be connected to the enterprise server 200.

Regarding independent claim 25, Acharya fails to disclose an access router having a network connection to at least two serving networks. This is shown in Figs. 1-8 wherein Access Router AR2 has connection to two serving networks N2, N3; ISP2, ISP3, etc. In contrast, the border routers 140, 150 of Acharya each have network connection to only one serving network. Edge router 130 does not correspond to the claimed access router as the edge router provides direct connection and not a network connection between the enterprise server and the border routers, as shown.

Further, Acharya fails to disclose receiving from a client node serving network information specifying a serving network to which the client node desires to have access. No client node operation is disclosed by Acharya. Network routing of outgoing packets only is determined solely by performance measurement of the server 200.

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Finally, Acharya also fails to disclose binding the communication tunnel to the specified serving network by using serving network information as a security association identifier of the communication tunnel.

The rejection of claims 2, 8, 11, 12, 14-16, 18-21, 26 and 27 under 35 USC § 103 as being unpatentable over Acharya in view of Forsl w (2002/0069278) and claim 7 as being unpatentable over Acharya in view of Le (2004/0019664), also are respectfully traversed. Forsl w is directed to a network-based mobile workgroup system that provides secure communication within an overlaid workgroup network. Forsl w is irrelevant to the present invention as claimed and as such fails to cure the basic deficiency of Acharya with respect to the independent claims. Therefore no combination of Forsl w with Acharya could result in the invention as set forth in claims 2, 8, 11, 12, 14-16, 18-21, 23, 24, 26 and 27. Withdrawal of this ground of rejection is requested.

Le is directed to network discovery and in particular to discovery of a network agent in an IP environment. Le similarly fails to make up for the fundamental shortcoming of Acharya with respect to the independent claims of the present application, and as such no combination of Le with Acharya could result in the invention as set forth in claim 7. Notwithstanding this, Le would not be combined with Acharya as proposed in the Office Action, as Acharya does not use IP layer network discovery but instead is directed to link layer network routing control as explained above. Therefore, there would be no reason to attempt to combine Le with Acharya as no useful purpose would be accomplished thereby. Withdrawal of this ground of rejection also is requested.

Conclusion

In view of the foregoing, claims 1-21 and 25-27 are submitted to be patentable over the prior art of record, whether considered individually or in combination.

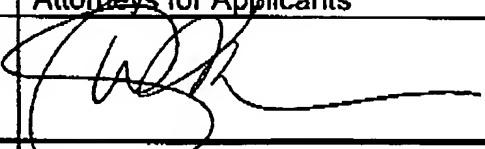
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Withdrawal of the outstanding grounds of rejection and the issuance of a Notice of Allowance are earnestly solicited.

Please charge any fee or credit any overpayment pursuant to 37 CFR 1.16 or 1.17 to Deposit Account No. 14-1437.

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